PLAINS FORESTER

U.S.FOREST SERVICE LINCOLN, NEBRASKA

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THE CHANGING PATTERN OF LEADERSHIP

Elsewhere in this issue State Director Ford presents an interesting example of the constantly changing picture of public leadership. Today, only two of the 90 men whom he considered leaders 14 years ago are still on the scene in that capacity; an almost complete turnover in a short decade and a half.

What happened directly to depose these stalwarts of yesterday? Death, of course, in part, but for the rest it was the pushing up of men with better - or at least newer - ideas; with less mental hardening of the arteries; with greater vigor and fresher ambition. Full of contradictory results and ruthless ingratitude for past services as the process may be, by and large, it is a process of progress. It is what makes democracies more virile than authoritarian types of governments; organizations inevitably stagnate once position is secure by virtue of law rather than maintained by personal effort.

Whatever may be the merits of the process, its operation is a fact in this country and the lesson for us in the experience cited is twofold: We must be able to sense and analyze the trends upon which each crop of leaders climb to public esteem in order that we may keep our program in alignment with the trends of the times, and we must be alert to the changes in leadership personnel.

It is readily accepted, of course, that we must spread the gospel of the need for farm forestry largely through the leaders of public thought in the region, but it is easy to stagnate in the matter of identifying leadership. Ford's list of 14 years ago would be practically valueless today, a fact which he has recognized by making an almost 100% revision of it since that time. Whether a leader has a considerable tenure of position or is of the "flash-in-the-pan" variety, it is important to recognize him as a leader while he is; the farm forestry movement needs all of the help it can get.

- E. L. Perry, R.O.

THE ROWS ARE ALREADY MARKED

On a recent inspection trip I frequently noticed where stubble of row crops such as sorghum and corn and the old cotton stalks would serve as an excellent guide for the planters and do away with the need of hand marking. Where such rows will serve the purpose of keeping parallel alignment and approximately the required spacing between the rows, I can see no just reason for the extra expense of hand marking. Usually the rows of stubble are approximately parallel to the fence or field boundary. If the outside row of stubble is even as much as four feet closer to the fence on one end of the half-mile strip than on the other, that is good enough so long as the isolation strip is left wide enough at the most narrow place for machine cultivation.

As a matter of fact, when we superimpose our hand marking on these stubble rows that are not quite parallel to the fence line, cultivating is made more difficult every time the tree row crosses the stubble row. How much better and simpler to use the stubble row as a guide and set the trees say, one foot to the right, or if the rows of stubble are closely spaced, in the center of the spacing between the rows. This practice would of course apply only on land which had been left in stubble to hold the soil from blowing until planted, and where it was unnecessary to subsoil.

- D. S. Olson, R.O.

WE WOULDN'T LIKE THAT STUFF EITHER

I would like to call your attention to an experiment in the use of repellents made by one of our cooperators in the Oakes District.

This man, who refused to use poisoned bait, obtained at his own expense the ingredients for a repellent that consisted of equal parts of lime, sulphur and glue. After mixing it with warm water, the repellent was sprayed on his one-half mile of trees. The cost of this operation was about $9.00 and took two days.

This strip was inspected by our Rodent Control Supervisor a day or two after a light snow had fallen and the snow was still clinging to the branches and trunks of the trees.

In one instance he noted the fresh tracks of a rabbit that had followed a row of Chinese elm for a distance of 120 feet. The tracks showed that the rabbit had stopped at every tree and knocked the snow from part of the tree but without damaging the tree in any way. He also noted that there was a well-traveled rabbit path extending the full length of the strip and at numerous intervals along this path a rabbit had detoured 10 or 15 feet to inspect a tree but without damaging it, and then he had returned directly to the path.

- F. E. Cobb, N.Dak.

VERILY, IT PAYS TO ADVERTISE

Twenty-five merchants of Kinsley, Kansas expressed their belief in the value of advertising February 3, when they inserted a full-page advertisement for a minimum of one-half inch of rain before midnight, February 17, in the Kinsley Graphic. Mrs. Cora G. Lewis, editor of the Graphic, offered to give the merchants this space free of charge if Kinsley failed to get the minimum one-half inch of moisture before the dead line, and the merchants agreed to pay double the regular advertising rate should the rain fall as per agreement.

At ten o'clock Wednesday morning, February 16, Mrs. Lewis called the Forest Service to announce that her contract had been fulfilled and that she had .03 of an inch to spare and that from all indications she might be able to even double the amount of moisture that she had contracted for.

The Forest Service, whose work has been curtailed by the extended drought since November 1, expressed its gratitude for the faith of the merchants in advertising, by requisitioning an additional 35 men to start immediate operations as soon as the ice and snow melt and the men can get into the fields.

- Ralph V. Johnston, Kans.

ITALY TO PLANT BELT OF TREES ACROSS MARSH

Rome--Huge tree-lined avenues totaling about 1,000 miles in length and involving the planting of 3,500,000 trees will be built in the recently reclaimed Pontine marshlands within the next five years, it has been announced.

This undertaking, already started on a small scale, is meant to serve a double purpose--to break the force of the winds sweeping over the flat lands of the reclaimed area, thus minimizing the damage resulting therefrom, and to obtain as much pulpwood as possible.

A third, though minor result, will be that of breaking the too monotonous sight of the area, now completely treeless in consequence of the removal of all arboreal vegetation during the reclamation of the marshes.

In stormy weather the area is swept by winds blowing from northwesterly, southwesterly and southeasterly directions, which often assume cyclonic proportions, and cause heavy damage to the sowings or the crops. Losses amounting to several million lire have been recorded since the reclamation was brought to an end.

Experts who have been seeking a remedy have come to the conclusion that the most efficacious one would be long rows of tall trees rising along the fringe of roads, canals and boundaries of the major farms. Against these trees the winds would spend their force. The trees would have the same function as breakwaters which protect harbors.

- From "Oklahoma City Times"

HEDGE SAVES WHEAT CROP

Evidence that trees do have a real dollars and cents value continues to accumulate. The following incident has just come to our attention:

Mr. Jake Routh, a farmer living three miles west and a half-mile north of Kingman has informed us that if it had not been for a hedge row along the south side of his neighbor's field he would have lost 100 acres of wheat this year. A strong north wind blew out a quarter section of wheat directly north of the land which Mr. Routh is farming. The presence of the Osage orange hedge kept the wind from sweeping over his field and blowing out the wheat. The only wheat which Mr. Routh lost was a small area directly south of a gap in the hedge, where about one acre was blown out. In this it was demonstrated very forcibly to Mr. Routh what would have happened to his wheat if the hedge had not been there.

- Robert A. Dellberg, Kans.

RAPID TURNOVER IN LEADERSHIP

In a recent letter State Director Ford has the following to say about the necessity for constant revision of key lists:

"I came to South Dakota in 1919 as an Extension Specialist. Since it was part of my job to promote certain improved agricultural practices in the State, leadership contact was important. I waited for five years before I attempted to make a list of the agricultural leaders of the State. It takes at least that long to get halfway properly acquainted. In 1924 I made up this first leadership list which consisted of 90 persons exclusive of Extension people and County Agents.

"Yesterday I completed the revision of our present key list, bringing it up-to-date. I was interested to see how this current list of leaders in the State compared with my old list made up in 1924 (14 years ago). The 1924 list consisted of 90 persons and the present list of 61 persons. There are only two persons on our current list who were on the leadership list in 1924, fourteen years ago.

"This is a concrete example of how rapidly the leadership pattern of an agricultural State changes. It also serves as pretty conclusive proof that to keep current with leadership we must keep constantly on our toes or we will find our leadership folks have gone off and left us.

"It further indicates that unless our key lists are completely revised at least once a year, we will become prematurely old-fashioned."

BOOTS FOR BABY PINES

Experiments now being carried on at the Fremont Nurseries may result in a radical change in future methods of growing and field planting our conifers.

The idea being tried is a modification of paper pots called "plant boots." The boot is a narrow receptacle open on one side and both ends, made by attaching a 16" piece of lath to the center of a piece of asphalt paper 5" x 16" and folding the protruding sides of the paper at right angles to make a "U" shaped trough. The boots are fitted snugly side by side into a lift tray $2\frac{1}{2}$ x 16 x 24" which holds 14 boots. Conifers 1-0 grade are transplanted into the soil-filled boots which remain in the trays for more rapid and convenient handling throughout the operations of growing in the nursery and planting in the field.

The lath permits using a receptacle of long narrow proportions, and even if the paper becomes quite rotten from contact with the soil in the nursery, the lath forms a "splint" for the roots while being transplanted.

The initial cost of growing and planting trees in this manner will be higher than for bare-rooted stock, but it is expected that high survival ratios will more than offset it. The method has been highly successful for establishing tap-rooted deciduous trees in difficult locations.

- Carl A. Taylor, Nebr.

SORTS OUT THE PLANTERS

Planting work in the Elk City District is progressing at a very rapid rate of speed. Two hundred and five miles have been planted to date, 79 of which were planted the last week prior to the two weeks' rain and snow storm which has delayed planting, but which will be of great benefit to the trees now in the ground.

At the present time Harry Eaton has the record for planting more miles than any other one man in the District. Mr. Eaton is hanging up a record for someone to shoot at as the current year's planting goes on. With nine crews planting 51-1/2 miles of trees in a five-day week, they average better than one mile per crew per day. Close inspection of the work indicates that his crews are doing a high-class planting job, though that is the case with all other crews in the District.

Perhaps Mr. Arnold's No. 1 crew, with a record of two miles in one day is the best day's work accomplished so far, though Mr. Eaton's No. 1 crew was only one-fourth of a mile behind, planting one and three-fourths miles for the same day.

The Elk City District, in line with the Forest Service's practice of grading and classifying everything else, graded and classified its planters according to their ability to plant, with the following results:

First, all of the faster planters who did an excellent job of work were picked out and put in Crew No. 1; second fastest were put in Crew No. 2, and so on down. The results have been that the poorest crews are planting approximately as much as the average crew was planting before the planters were graded and classified. Crew No. 1 is planting, on an average, twice as much, with Crew No. 2 running a close second to Crew No. 1. No. 3 crews show a very marked increase over the No. 4 and 5 crews.

All of the increased planting of Crews 1, 2 and 3 tends to bring down the cost of planting operations for the entire District since the lower crews are planting about as much as the average crews did in the past. One of the principal advantages of this scheme is that the planters of a crew remain closer together, are more easily supervised, and there is not the feeling that one man is doing considerably more work than some other similarly paid worker. Even though this is actually the case, it is not so apparent as when both types of planters work on the same crew.

This system has enabled us to increase our output per crew day from about .65 mile to better than a mile.

- James W. Kyle, Okla.

THIS LOOKS LIKE A RECORD KILL

It is reported that Frank Duquoin in the Kinsley District put out poison bait on one-fourth mile of his shelterbelt strip on February 6 and has kept accurate record of his kills. Up to February 28, he had counted 512 dead jackrabbits on this small tract.

- T. Russell Reitz, Kans.

A NEWCOMER LOOKS AT THE PROJECT

Sometime last summer I received a letter from the Biological Survey asking if I would accept a position in North Dakota taking charge of rodent control in the State. The letter went on to say that I could start as soon as the necessary papers were fixed up and that the job would last until the first of January, or possibly all winter.

Now here was something! Having memories of poisoning ground squirrels and prairie dogs on the hot scorching prairies of Montana, I was at a loss as to what kind of rodents needed controlling in North Dakota in the winter time. But being of a philosophical nature I replied that I would be available immediately.

Time went on. Then late in October I received a letter from the Forest Service in Washington saying I had been appointed Senior Biological Aide and was to report to the State Office of the Forest Service at Jamestown, North Dakota on November 1. Shades of Paul Bunyan! I was to work for the Forest Service on rodent control in North Dakota.

Hunting up old acquaintances whom I knew had lived in North Dakota at one time, I asked them what timber there was in that State. There wasn't any, they told me, at least not to amount to anything; there being possibly some scrub oak, scrawny aspen and birch scattered around in little patches. Then, of course, there were the cottonwoods, boxelders, and willows along the river banks and the groves of trees around the farm buildings.

But all this didn't add up nor make sense; so after an all-night drive I reported at the State Office of the Forest Service in Jamestown on the first day of November, still unenlightened as to what it was all about. Then for three days I stayed in the State Office and learned things. I signed numerous papers, read stacks of literature, and pored over piles of reports. I made a four-day trip out in the field with Mr. Willson, District Officer at Oakes, and learned some more. I learned that North Dakota was in the throes of an enormous tree-planting program, as were also South Dakota, Nebraska, Kansas, Oklahoma, and Texas. I also learned that under certain conditions, the farmers within the Project planting area of the six States were each being given hundreds of trees--yes, thousands of trees. I learned that not only were the trees given to the farmers, but that the Forest Service planted them free of charge; that they were equipped to help cultivate them if the farmers could not do it themselves; that a spirit of friendliness and cooperation was being carefully fostered and maintained between the farmers and the Forest Service.

During this four-day trip in the field, I saw that the trees were not planted haphazardly, but were laid out in a well-planned design with method and purpose; also that the ultimate aim of all this activity was to eventually have all these strips connected and extend for miles and miles, with cross strips wherever needed.

I was shown evidence of damage by rabbits, where Chinese elm had been changed from a tree to a bush and even cottonwoods had been set back a year in growth, if not actually killed by girdling. Then I commenced to see where I fitted into the picture; that the responsibilities of the Forest Service did not end with the furnishing and planting of the trees; that it was to be my duty to work with the farmers and instruct them in the method and manner in

which rabbit infestation could be controlled; and that I was to foster and perpetuate a feeling of cooperation among the farmers in this work in order that the greatest number of trees possible might survive, and that the initial work of the Forest Service might not go for naught.

After this trip I was able to vision the Prairie States as they might look in the future--cross hatched by shelterbelt strips. I now began to get the idea. Though strip farming, contour listing and other dryland farming practices might be all right to meet the immediate situation, they will be abandoned or forgotten as soon as the good years come again. This will not be so in regard to the shelterbelt strips. True, they will have to be carefully tended and cultivated under trying conditions during the present dry spell, but when the good years come they will grow and prosper so that when the next cycle of dry years arrives, as it most certainly will, there will be entirely different conditions from those that existed this time. No longer will the hot searing winds be able to sweep across the Prairie States unhindered; no fine particles of sand sift along close to the ground cutting off the young growing crops in some parts of the fields, and drifting them under in other parts, causing destruction of crops and swift evaporation of moisture. Nor will there be great clouds of dust rolling in from the west, blanketing vast scopes of country in darkness and bringing distress to every living thing within its boundaries. It is not claimed that drouth conditions will never touch the Prairie States again, but it is hoped that its devastating effect will be greatly mitigated as a result of the present tree-planting program.

Back in the State Office I found that some of the State Office force and all the District Officers had developed migratory tendencies. Each one was making feverish plans for departure for the South, and so within a short month after my arrival they had folded up their tents and stolen away like the Arab, or a curlew--well, maybe not a curlew, but a crow anyway.

Now spring is about here and I have spent a winter in North Dakota. Already our migratory friends are commencing to drift back from the South, and I find that I am just as glad to see them as anyone. And why is this, I wonder? Is it because I am about to pass the "Newcomer" stage and that I will soon be classed as an "Oldtimer"?

- Auburn S. Coe, N.Dak.

CHIPPEWA SEED IN NEBRASKA NURSERY GOES TO OTTAWA PLANTATION SITE

Genetically speaking Chippewa seeds will have a lot of prairie dust in their coats when they arrive on the Ottawa this spring two generations removed, but as seedlings.

About 20 years ago jack pine seed from the Chippewa Forest was sent to the Bessey Nursery - U.S.F.S. - at Halsey, Nebraska, to be planted and grown as plantation stock. During the World War the plantation seed-stock of Region Nine, then Region Two, was established. After 17 years of excellent growth on Nebraska soil, cones were collected from this plantation and sown in nursery beds at the Bessey Nursery about two years ago.

The Ottawa Forest, now badly in need of stock to fill planting requirements for ground already prepared for this spring's planting, has ordered one million seedlings of this famous Chippewa vintage seed that carries a Nebraska 1-1 pedigree.

- R.9 "Daily Contact"

WOODS AND WILDLIFE

March 20 to 27 has been set aside as National Wildlife Conservation Week. I feel that something should be said about the relationship between the establishment of prospective windbreaks and wildlife conservation.

As a nation, we have been dealing with our wildlife much as we have with most of our natural resources, acting first and considering the consequences later. The 185,000,000 acres of farm woodlands in the United States have been recognized as valuable in producing fuel, lumber and posts; in conserving moisture; in checking erosion; as windbreaks and snow fences; in the production of a number of products; and in promoting general recreation. But heretofore, apparently, little consideration has been given to woodlots and windbreaks as wildlife production areas, though they contain most types of wildlife coverts. The potential wildlife production of farm woodlots and windbreaks, which average 27 acres to a farm--17 percent of our total farm area--is too large to be lightly dismissed; yet their potential production has scarcely been imagined, much less achieved.

For one economic reason or another, as just outlined, or to make the farm a more attractive, enjoyable spot in which to live, it is profitable to establish or extend prospective windbreaks to practically all places that are suited to forest growth and will provide wind protection for valuable agricultural land. In fact, it can readily be shown that windbreaks and their associated products are among the most valuable of farm crops and may contribute more to farm income than similar acreages of wheat, corn or pasture.

Cover as afforded by shelterbelt plantings does much to justify its maintenance by harboring some of the most important groups of insect enemies, beneficial birds. In fact, brown thrasher, catbird, kingbird, goldfinch, many warblers, the quail, and a number of other beautiful and attractive birds are ordinarily found in this type of cover, but generally not where it is absent. Unlike man-made agencies of control, birds continue their activities throughout the seasons, and they work in and through crops where men cannot go.

Scores of instances are known in which birds have suppressed local outbreaks of insect pests, and while their work in insect control is not always so spectacular, it is a steady aid that should always be encouraged. It is certainly good agricultural practice to maintain an environment that will attract and hold these farm laborers who offer to make their principal job the killing of insects and other crop pests, asking nothing in return but their board and lodging.

Planting to improve cover can well be made to serve a double purpose. The windbreak as conceived by the Forest Service serves a dual purpose. It affords cover, and food for game, fur bearers, and song and insectivorous birds in addition to protecting valuable crop land from wind erosion. Restoring wind protection for fields will likewise make for an improved environment for all wildlife.

In addition to providing fuel, lumber and posts; conserving moisture; in checking erosion; as windbreaks and snow fences; the affording of an improved environment for all wildlife should be an additional incentive for the establishment of prospective windbreaks.

- Carroll F. Orendorff, U.S.B.S. (Nebr.)

OPEN LETTER TO THE SPORTS EDITOR OF PLAINS FORESTER

Not that we are particularly concerned one way or the other, or that it will put any additional feathers in our collective cap, but we are wondering why no space is given to this battle of the bowlers being conducted between the Commercial League and the Texas Tinhorns. Doesn't the Editor know that after many weeks of grueling endeavor the score stands: Texas, won 17, lost 19; Regional Office, won 19, lost 17? Hasn't he heard of the strategic position we're attempting to establish and maintain as a result of Mr. Bartos' ineligibility (claimed but apparently not yet proved) to bowl with the Commercialites since he was transferred to the Nebraska State Unit? And has no rumor seeped through of the magnificant coup whereby we refigured averages for the Nebraskans and found them to be undercutting to the tune of 30 or 40 pins? (Details may be secured from the files of the Commercial League.) And haven't we set a precedent in organizing a four-men, one-woman team? And doesn't our star bowler, Lou Wirth, deserve special mention, or are his strikes so commonplace by now as not to be news?

Of course not every reader of PLAINS FORESTER may be a bowling addict, but surely many would be glad to know that one insignificant little team challenged and so far has almost stayed even (by much pintoppling and a little palavering) with the renowned and formidable Commercial Leaguers.

A la W.B.I. in last month's issue, "We have met the enemy and they are ours" - almost!

Well, Mr. Editor, do we have something here, or do we?

- Maurine Alexander, Tex.

(One gillion apologies, Maurine! Our only excuse is that after establishing an all-time low of practically no pins in three games a couple of months ago, we ripped our bowling shirt into shreds, hurled our shoes out of the window, and renounced the (deleted by the Editor's Secretary who don't hold with such language) game forever. However, for the benefit of those unfortunate persons who are still sunk in the mire of the wretched pastime, we are willing to lend the pages of this Palladium of fair play to the alibis, accusations, and recriminations with which each party to this jousting is obviously seething. Since our emancipation from the soul-destroying clutches of the game we shall be able to sit in cold and austere judgment upon the merits of the controversy - and may the best average-manipulators win. - Ed.)

TOWNER NURSERY RECREATIONAL AREA BEING DEVELOPED

Work is progressing on the recreational area of 80 acres at the Towner Nursery site. Picnic tables have been painted during the winter; grates and plates for outdoor fireplaces have been procured, and much dead wood cut and sawed into stove-length blocks. Footings are being prepared for the bridge and WPA toilets are being constructed.

Last year over 2,000 people used this wooded area for picnic purposes, without improvements. The added facilities available and the bridge across the Souris River will take the people into the wood west of the river rather than the narrow fringe of trees on the east side. Planting of larch transplants in the boggy area adjacent will eventually add a border of trees west of the nursery, covering about 40 acres. The people of Towner have asked that this recreational area be named. Requests have been made of them to submit names, and the State Historical Society has been asked to submit any names of local pioneers or Indians which may be appropriate.

- F. E. Cobb, N.Dak.

TEXANS SEE DEMONSTRATION PLANTING

On Tuesday, March 1, the writer had the privilege of attending a shelterbelt field day put on by Junior Forester Tom Croker at Vernon, Texas. Croker had spent a great deal of thought and time preparing for this demonstration, and the results obtained were conclusive proof of the worth whileness of a good plan.

Except in the afternoon when about 150 children from the local schools visited the strip in three buses, at no time was there a large crowd on the strip, but all during the day small groups of interested people came out to observe the planting crew functioning and to listen to the talks given by Croker and Deede.

The Agricultural Committee of the Vernon Chamber of Commerce had cooperated with Croker to the extent that it had sent out personal invitations to interested farmers and merchants, and members of the various Service Clubs; the Rotary Club sent a good delegation out to view the demonstration following its luncheon that noon.

Applications have been slow in coming in on Croker's District, but as a direct result of this demonstration, four additional miles have been signed up already and we know that with the additional interest and enthusiasm engendered by this demonstration still more applications will come in.

In Junior Forester Morgan's District at Shamrock, there has been considerable educational work done with the 4-H Clubs and country schools. During a recent visit by a 4-H Club to a planting crew working on a demonstration planting near Shamrock, the youngsters became so interested and enthused that they took over the planting shovels from the crew and proceeded to plant some of the trees in the belt themselves.

With this type of educational work going on among the younger generation, we are sure that their enthusiasm will be contagious and spread to their parents. It is our hope that in time Texas will be in the same position as our friend Lund in South Dakota, and have as our chief worry the disagreeable(?) task of having to select our planting sites from among too many applications.

- W. E. Webb, Tex.

(According to the newspaper report on the demonstration, a total of some 250 visitors appeared on the scene during the day, including a representative from the S.C.S., and a number of County Agents. - Ed.)

COUNTIES FURNISH TRANSPORTATION

With just a little talking to the County Commissioners of each of the three counties in the St. John District, we are being furnished a truck by each county to use during spring planting. You notice I said "with just a little talking." It was no trouble at all to get the commissioners to do this; they realize that we are a valuable asset to the county. Along with getting a truck, Barton County is putting a shelterbelt planting on the county farm and Stafford County intends to do so next year.

- Glenn W. Spring, Kans.

GOING TO SLAY THEM IN THE ACT

The Elk City District has not gone in very much for experimentation in rodent control, but inasmuch as the State had some wax left over from wax experimental work, the idea came to the minds of the Officials at Elk City that it might be possible to mix strychnine with wax for rodent control purposes. After discussing the matter with Mr. Regnier and finding that he thought it was feasible, materials were secured to treat a limited amount of those species which rabbits seem to use for dessert, such as Chinese elm, honeylocust, and American elm.

At this time a sufficient number of trees have been treated to assure us that the strychnine will mix into the wax and that the trees will carry a very even coat of the mixture. Three definite mixtures are being prepared for use in the field. Each one of these mixtures will be tried in different areas and the results carefully tabulated. The results will be announced when and if there are any.

- James W. Kyle, Okla.

IT FALLS ALIKE UPON THE JUST AND THE UNJUST, "WHITEY"

I have believed nearly everything that I have read in PLAINS FORESTER up-to-date, but from now on it's different. Many stories have been told about the detailed boys going to the "Sunny South" for the winter. Now I have reason to doubt the "Sunny South" part of the yarns.

I accompanied our State Director, Mr. Emerson, and Shelterbelt Assistant Champagne on a recent trip to Kansas, Oklahoma, and Texas during the last half of February. On this trip we saw the sun ONE day. However, I am glad to have had the opportunity of seeing it rain again, and we really had an enjoyable trip.

I, for one, got a world of knowledge and ideas from seeing how other States were handling their big planting job. To top it all off, the "Sunny South," with moisture conditions such as they are down there, should get a running start on both tree and weed growth. On our return trip back to Lincoln we saw plenty of rain and snow and boy! was I feeling good to think that Nebraska had moisture too! Alas, upon arriving home I found that we were still quite high-and-dry up here on the Alliance District.

Nevertheless, we haven't given up yet. Sam Byars down in Oklahoma says "the only way to play this game is to have faith and stay for the last card" and Sam seems to generally make that philosophy pay. So we still have faith and will see the fifth card . . . . But gosh! I hope it rains!

- Sterling C. Neubauer, Nebr.

YEH, WE WOULDN'T KNOW EITHER

After what seems like months of intensive study on precipitation and its relationship to plant growth, the following analysis is presented:

I made a graph that shows just why
The plants don't grow when it is dry,
But I forgot to show as yet
Why plants don't grow when it is wet.

- Basil the Crane
- Reg. 4 "Daily News"

THE COTTONWOOD

(Populus Sargentii (Dode) and Populus deltoides virginiana (Sudworth))

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(Editor's Note - This is the first of a series of articles by members of the Division of Timber Management dealing with the principal tree and shrub species used in our planting work. Others will appear as circumstances permit).

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If all members of the Prairie States Forestry Project were suddenly called upon to identify full-grown specimens of all the species used in our plantings, undoubtedly the cottonwoods would be correctly identified by more of us than any other species. Nearly everyone acquainted with Plains conditions can visualize the tall, bare, and rather ragged and open appearance of cottonwood. Incidentally, it is one of five strictly native species which are used throughout our entire zone of operations. How many of our personnel can offhand name the other four? Also of interest is the fact that cottonwood is the State tree of Kansas.

Thus far in our planting operations more cottonwoods have been planted than any other tree. This in itself indicates the true value of the tree in our work. On favorable sites (those having a deep soil of a sandy nature or those sites having a shallow water table) the cottonwood is well adapted and establishes itself faster, grows taller, and produces more volume than any other species. During the early life of a shelterbelt it stimulates interest in the plantation because of its habit of rapid and vigorous growth, though the slower growing and less showy species may ultimately be of greater value.

One frequently hears the expression that "a fast-growing tree is a short-lived tree." There is perhaps more than a little truth in this since the cottonwood is ordinarily grouped among the temporary class of trees along with boxelder and Chinese elm. Nevertheless on those sites to which it is well adapted its longevity compares very favorably with other broadleaf species. On unfavorable or difficult sites it is one of the first to die and therein lies the danger in its indiscriminate planting. Nothing lowers a farmer's interest in a plantation more than having even part of the trees of which it is composed die at an early age.

Cottonwood is probably the only species included in our composition which will be of any importance as saw timber. Cottonwood lumber if properly seasoned has a wide variety of uses, especially where it can be protected from the weather. Its wood also is valuable for fuel, but has no utility as posts unless creosoted, since the wood deteriorates rapidly in contact with the ground. Since this species affords no food for wildlife other than for beavers, its principal value in this connection lies in that it provides cover and nesting places for birds.

Ordinarily cottonwood planting stock is readily available as seedlings growing on river sand bars and on low wet ground. Because of its ready availability it has been more extensively planted by private individuals than any other species. The early homesteaders planted great numbers of them during the days of the "Timber Claim Act" and many of these thrived exceedingly well. It is still possible to find many of these early plantings serving a worthwhile purpose, but a large part of them have been harvested for fuel and lumber.

Wherever waste land exists to which the cottonwood is adapted, encouragement should be given to the planting of this species. In 20 to 30 years such land will yield saw timber as well as large quantities of fuel. Also since the cottonwood has rather sparse foliage other more tolerant species will frequently come in as a natural understory and serve to maintain the best type of habitat for all forms of wildlife.

As a lawn or shade tree or for street planting cottonwood should be used sparingly. In this respect it is classed as a "dirty" tree in that it throws off an unusual amount of litter from broken limbs, twigs, bark scales, and "cotton." However, by planting male trees no difficulty will be encountered from cotton. Cottonwood is classed as a rather brittle tree and is therefore somewhat subject to breakage from high winds.

Insofar as insects, rodents, and diseases are concerned, cottonwood is probably no better nor any worse than the majority of our species. Borers become serious under certain conditions especially where borer-infested stock is planted. Grasshoppers seldom bother the cottonwood although instances have been reported where the young trees have been stripped and seriously injured.

Rabbits ordinarily avoid eating cottonwood and this is one of the main reasons why this species has met with such outstanding success in Plains planting.

Poplar canker is fairly common among cottonwoods. This disease is commonly introduced through injuries early in the life of the plant. It is seldom fatal unless drought or other adversities combine with it to kill the tree.

- Harold E. Engstrom, R.O.

COMMITTEE CONDUCTS RODENT CONTROL

Mr. J. L. Cunningham, County Agent of Roger Mills County, Oklahoma, has an idea that other County Agents might well copy.

Mr. Cunningham has a local committee of three men, picked from various parts of the county, who are put in charge of all Rodent and Crow Control Campaigns. One of the committee men is selected as chairman and it is up to him to see that interest is maintained. This committee carries on a crow roost survey, the prairie dog survey, and the rabbit drives. They see that the various campaigns are arranged and select the sites for operation.

This committee gives full cooperation to the Forest Service. In the month of January, Roger Mills County contributed 3,347 man hours--this was used in rabbit drives. Three drives were held and it was estimated that a total of 3,100 rabbits were killed. Various crow shoots have been held in the county. At the present time the committee is working on a prairie dog survey with the idea of holding a county-wide "mop-up" campaign.

Two of the committee men have Forest Service plantings on their farms.

- Carl Regnier, U.S.B.S., Kans.

DROUGHT PREDICTION

Dr. Charles D. Abbot, secretary of the Smithsonian Institution, estimates the next great drought will occur about 1975. The scientist told a House appropriation sub-committee he had confirmed the prediction, based on long-range changes in the sun's radiation, by a recent study of tree rings in Vermont and New Hampshire over 400 years. His study was based on the work of Professor Lyon, of Dartmouth. "It is becoming more and more accepted, I think, by meteorologists and physicists, that I have shown that there is in the weather a 23-year, a 46-year and a 92-year cycle of events," Dr. Abbot said.

- Reg. 6 "Six Twenty Six"

: KANSAS :

The Walter Gosnell family, who arrived recently bag and baggage from the Oklahoma Unit, are a welcome addition to the Kansas F. S. group. They are located at 350 North 15th Street, near State College. Gozzie has taken over the helm at the Manhattan Nursery, a post recently vacated by Raymond Buskirk.

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We have again survived the annual audit of the Kansas Unit (we hope--the formal opinion hasn't been handed down yet). Frank Hausherr of the Regional Office, who conducted the audit, gave generously of his time in helping to unravel some of the Unit's problems and in offering suggestions toward improved procedures.

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State Director John L. Emerson, E. Garth Champagne and Sterling C. Neubauer of the Nebraska Unit were welcome callers at the State Office recently. The group was making an inspection tour with a view to improving its nursery and planting operations through an observation of these activities in progress on the Kansas, Oklahoma and Texas Units. These Officers and Frank Hausherr were dinner guests at the Harold Swims' home while in Manhattan.

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Kenneth W. Taylor and Merrill H. Willson, who have assisted materially with negotiation, planting and public relations work since the beginning of their detail here December 1, have returned to the North Dakota Unit.

- J. D. Hall

: REGIONAL OFFICE :

We expect there's been enough said already about the bowling match between the men and the girls in the Regional and Nebraska Offices March 17. The good old worm turned, bless his heart, and the girls were victorious in both sets. Thanks, fellows, for the lovely chicken dinner, and for the 100% handicap which you so freely and willingly gave us. Next event will be mixed doubles. (Mrs. Dundis extends special thanks to Mr. Roberts for the chicken wing).

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Mark Thomas (F.C.) passed cigars and candy the other day following announcement of his coming marriage. We hope he doesn't believe this will relieve him of similar responsibilities when the wedding takes place.

- Lucille E. Clark, R.O.